Greenridge Utilities, Inc.
System I.D. 0120011
2009 Water Quality Report

We are pleased to provide you with the 2009 Water Quality Report. This report is designed to inform you of the quality of water we delivered to you over the past year. Our goal is to provide you a safe and dependable supply of drinking water. Our wells draw from the Port Deposit Gneiss aquifer in Harford County. An aquifer is a geological formation that contains water. We also purchase water from the Harford County Water System. Harford County draws water from several sources. The Perryman Water Plant draws water from the Potomac group aquifer. The Abingdon Water Plant draws surface water from the Susquehanna River or the Loch Raven Reservoir and the County's Havre de Grace Water Plant draws water from the Susquehanna River.

We currently have no regularly scheduled meetings. If you have any questions about this report or your water utility, please contact customer service at (800) 860-4512. We want our customers to be informed about their water utility.

Source Water Assessment (SWA) – The Maryland Department of the Environment has completed a SWA for the water system. The source for Greenridge Utilities water supply is an unconfined, Piedmont aquifer known as the Port Deposit Gneiss. The SWA area for the Greenridge Utilities wells were delineated using U.S. EPA approved methods specifically designed for each source. Potential sources of contamination within the assessment area were identified based on site visits, database reviews, and land use maps. Well information and water quality data were also reviewed. Figures showing land use and potential contaminant sources within the SWA area and an aerial photograph of the well locations are enclosed in the full (SWA) report. The susceptibility analysis of the Greenridge Utilities water supply was based on the review of the water quality data, potential sources of contamination, aquifer characteristics, and well integrity. It was determined that the Greenridge Utilities water supply is susceptible to contamination by nitrates, and radionuclides, but is not susceptible to volatile organic compounds (VOCs), synthetic organic compounds (SOCs), microbiological contaminants, and other regulated inorganic compounds (IOCs). If you would like to review the report or have any other questions or concerns regarding it please call our office at (800) 860–4512.

Greenridge Utilities, Inc. routinely monitors for components in your drinking water according to Federal and State laws. This report covers the period of January 1 to December 31, 2009. We are pleased to report that our drinking water meets all federal and state requirements.

Definitions:

- Not Applicable (N/A) – Information not applicable/not required for that particular regulated contaminant.
- Non Detects (ND) – laboratory analysis indicates that the contaminant is not present at the level of detection set for the particular methodology used
- Standard units (S.U.) – standard units is a measurement of that particular regulated contaminant.
- Compliance Level (CL) – Is the value used to determine compliance with MCL or TT. The CL for contaminants can be a maximum test value, an average, or meeting a condition for a certain percentage of the time.
- Treatment Technique (TT) – a required process intended to reduce the level of a contaminant in drinking water.
- Intestinal Parasites – Microorganisms like Cryptosporidium and Giardia lamblia can cause gastrointestinal illness (e.g., diarrhea, vomiting, cramps). In 2004, two samples of untreated river water showed the presence of Giardia lamblia and Cryptosporidium. None were found in the treated drinking water.
- Parts per million (ppm) or milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.
- Parts per billion (ppb) or micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years or a single penny in $10,000,000.
- Picocuries per liter (pCi/L) – picocuries per liter is a measure of the radioactivity in water.
- Action level (AL) – action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Maximum contaminant level (MCL) - The maximum contaminant level is the highest level of a contaminant that is allowed in drinking
  water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
- Maximum contaminant level goal (MCLG) - The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
- Maximum Residual Disinfectant Level (MRDL): The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- Maximum Residual Disinfectant Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Based on certain criteria, some systems may be allowed to monitor for regulated contaminants less often than once a year. In this case, the table will include the date and results of the most recent sampling. Our system received monitoring waivers for: cyanide, nitrite, asbestos, combined uranium and radium-226.

Greenridge Utilities results

Inorganic Contaminants

Contaminant (units)	Sample Date	Violation Y/N	Your Water	# of sites found above the AL or Range Low High	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	2007	No	0.13	ND - 0.13	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper (ppm) (90^{th} percentile)	2008	No	0.72	0	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate (as Nitrogen) (ppm)	2009	No	5.3	3.5-5.3	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Disinfectants & Disinfection By-Product Contaminants

Contaminant (units)	Date	MCL/MRDL Violation Y/N	Your Water Average	Range Low High	MCLG	MCL	Likely Source of Contamination
HAA5 (ppb) [Total Haloacetic Acids]	2008	No	49.4	17.6 / **62.1	N/A	60	By-product of drinking water chlorination.
TTHM (ppb) [Total Trihalomethanes]	2008	No	43.2	16.4 / 62.4	N/A	80	By-product of drinking water chlorination
Chlorine (ppm)	2009	No	1.2	0.8-1.5	MRDLG = 4	MRDL = 4	Water additive used to control microbes

***Compliance is determined by the annual running average. The calculation of the average level of HAA5's is below the MCL; therefore the system remains in compliance. Average = rolling yearly average by quarter. Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.*

Synthetic Organic Chemical Contaminants including pesticides and herbicides

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water	Range Low High	MCLG	MCL	Likely Source of Contamination
Di(2-ethylhexyl) phthalate (ppb)	2008	No	0.51	0.51/0.51	0	6	Discharge from rubber and chemical factories
Pentachlorophenol (ppb)	2008	No	0.02	ND-0.02	0	1	Herbicide and wood preservative

Radioactive Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water (highest average)	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	2008	No	4	0	15	Erosion of natural deposits
Beta/photon emitters (pCi/L)	2008	No	3	0	50*	Decay of natural and man-made deposits

* Note: EPA considers 50 pCi/L to be the level of concern for beta particles.

Secondary Contaminants are substances that affect the taste, odor, and/or color of drinking water. These aesthetic contaminants normally do not have any health effects and normally do not affect the safety of your water.

Water Characteristics Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low/High	Secondary MCL
Sodium (ppm)	2007	76	60-76	N/A

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Unregulated Volatile Organic Chemical Contaminants

Contaminant (units)	Sample Date	Your Water	Range Low High
Bromodichloromethane (ppb)	2009	4	ND-4
Chloroform (ppb)	2009	14.3	ND-14.3
Dibromochloromethane (ppb)	2009	1	ND-1

HARFORD COUNTY GOVERNMENT WATER DATA 2009 (CCR)

Data from testing by Operations, Commercial Labs, MDE and City of Havre de Grace

Inorganic Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water CL	Range Low High	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	No	0.03	0.03 / 0.03	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	No	1.6	0.3 / 1.6	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) (ppm)	No	5.2	1.0 / 5.2	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	No	1.5	ND / 3	50	50	Discharge from petroleum factories.

Microbiological Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water CL	Range Low High	MCLG	MCL	Likely Source of Contamination
Turbidity (NTU) TT $\leq$ 0.3 in 95% of samples in a month.	No	100%	0.02 - 0.26	N/A	TT	Soil runoff. Average 0.05

Organic Contaminants

Contaminant (units)	MCL Violation Y/N	Your Water CL	Range Low High	MCLG	MCL	Likely Source of Contamination
Di (2-ethylhexyl) Phthalate (ppb)	No	0.6	ND – 1.8	0	6	Discharge from rubber and chemical factories
Hexachlorocyclopentadiene (ppb)	No	4	ND – 20	50	50	Discharge from chemical factories

Radioactive Contaminants

Contaminant (units)	Sample Date	MCL Violation Y/N	Your Water CL	Range Low High	MCLG	MCL	Likely Source of Contamination
Gross Alpha emitters (pCi/L)	2009	No	3	3 / 3	0	15	Erosion of natural deposits
Gross Beta/photon emitters (pCi/L)	2009	No	6	6 / 6	0	50 *	Decay of natural and man-made deposits
Radium-226(pCi/L)	2009	No	1	1 / 1	0	5	Erosion of natural deposits
Radium-228 (pCi/L)	2009	No	0.8	0.8 / 0.8	0	5	Erosion of natural deposits

* EPA considers 50 pCi/L to be the level of concern for beta particles

Unregulated Contaminants

Contaminant (units)	Your Water Average	Range Low High	Likely Source of Contamination
Total Phenolics (ppm)	0.01	ND – 0.02	Discharge from factories; leaching from gas storage tanks and landfills

Messages from Harford County:
- In 2009 Harford County had a reporting violation for Nitrate. The sample was collected by the required date and the Nitrate level met EPA standards, but the results weren't reported to the Maryland Department of Environment by the required date.
- Giardia – While their presence were found in the untreated river water, none were found in the treated water in 2009.

Nitrate

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency's Safe Drinking Water Hotline at (800) 426-4791.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:
- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Greenridge Utilities, Inc. is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Please call Customer Service at (800) 860-4512 if you have questions on the Greenridge test results at the beginning of the report. You may also call Talad Said or Allen Webb at (410) 638-3939 for questions on the Harford County test results or visit http://www.co.ha.md.us/dpw/ws [choose Water Quality Report] for additional information. We ask that all our customers help us protect our water sources which are the heart of our community, our way of life and our children's future.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alquien que lo entienda bien.